UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/830,794 | 05/01/2001 | Pramod Kakumanu Reddy | 7332 | 3673 |

27752 7590 06/16/2004

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

| EXAMINER | |
|---|---|
| BOYER, CHARLES I | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1751 | |

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

# MAILED

JUN 1 6 2004

# GROUP 1700

## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/830,794
Filing Date: May 01, 2001
Appellant(s): REDDY ET AL.

Armina E. Matthews
For Appellant

## EXAMINER'S ANSWER

This is in response to the appeal brief filed April 6, 2004.

***(1) Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

***(2) Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

***(3) Status of Claims***

The statement of the status of the claims contained in the brief is correct.

***(4) Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

***(5) Summary of Invention***

The summary of invention contained in the brief is correct.

***(6) Issues***

The appellant's statement of the issues in the brief is correct.

***(7) Grouping of Claims***

The rejection of claims 11-30 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

***(8) Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

***(9) Prior Art of Record***

| | | |
|---|---|---|
| 5,883,065 | Swift, II et al | 3-1999 |
| 5,955,415 | Gutierrez, et al | 9-1999 |
| 6,008,181 | Cripe et al | 12-1999 |

***(10) Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 11-13, 15-19, and 21-30 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gutierrez et al, US 5,955,415.

Gutierrez et al teach liquid laundry detergents (see abstract). An example of such a composition is a heavy duty liquid laundry detergent with a surfactant system containing 3.6% alkylbenzene sulfonate and other surfactants, as well as additives such as sodium citrate, polyethyleneimine, and 0.7% protease (col. 51, lines 20-45). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

In the alternative, if the HIC value is just outside applicants' presently claimed range, as the word "about" permits some tolerance (see ***In re Ayers***, 69 USPQ 109 (CCPA 1946), and ***In re Erickson***, 145 USPQ 207 (CCPA 1965)), an HIC value of 7 or 10 may be considered to read on the value of "about 8 to about 9.2" presently claimed. Alternatively, if the range of prior art and the claimed range do not overlap, obviousness may still exist if the ranges are close enough that one would not expect a difference in properties (see ***In re Woodruff***, 16 USPQ 2d 1934

(Fed. Cir. 1990); *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985); ***In re Aller***, 105 USPQ 233, 255 (CCPA 1955)).

Claims 11-13, 16-19, 21-26, and 28-30 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Swift et al, US 5,883,065.

Swift et al teach liquid laundry detergents (see abstract). An example of such a composition is a laundry detergent with a surfactant system containing 1.5% LAS and 98.5% ethoxylated alcohol, as well as additives such as citric acid, ethoxylated tetraethylenepentamine, and 0.2% protease (col. 17, example IV). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

In the alternative, if the HIC value is just outside applicants' presently claimed range, as the word "about" permits some tolerance (see ***In re Ayers***, 69 USPQ 109 (CCPA 1946), and ***In re Erickson***, 145 USPQ 207 (CCPA 1965)), an HIC value of 10 or 11 may be considered to read on the value of "about 8 to about 9.2" presently claimed. Alternatively, if the range of prior art and the claimed range do not overlap, obviousness may still exist if the ranges are close enough that one would not expect a difference in properties (see ***In re Woodruff***, 16 USPQ 2d 1934 (Fed. Cir. 1990); *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985); ***In re Aller***, 105 USPQ 233, 255 (CCPA 1955)).

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The rejection of claims 11-30 under 35 U.S.C. 103(a) as being unpatentable over Cripe et al, US 6,008,181 is withdrawn in view of appellants' arguments. The reference does not specifically teach a composition containing a combination of polymer and LAS as presently claimed.

### *(11) Response to Argument*

Appellants have traversed the rejection of Gutierrez et al, US 5,955,415, on the grounds that Gutierrez et al do not teach a polymer as claimed, nor do they teach a surfactant system having an $HI_C$ of from about 8 to about 9.2.

First, the examiner maintains that polyethyleneimine satisfies the polymer limitation of the present claims. Appellants are directed to page 16, paragraph 5 of their specification, where polyethyleneimines are disclosed as a suitable polymer of the invention.

With respect to the $HI_C$ value, though the examiner acknowledges that Gutierrez et al do not describe their surfactant system using the same parameters contrived by appellants, the surfactant system nevertheless, has an $HI_C$ value which meets that of

the present claims. The examiner has calculated the $HI_C$ value of the example cited above as 7.55, well within the range of "about 8" as presently claimed. Furthermore, a slight adjustment in the proportions of surfactants, well within the range of proportions taught by the reference, would result in an $HI_C$ value between 8 and 9.2. For example, if the ethoxylated alcohol in the detergent above is present in an amount of 5.5% by weight of the composition rather than 4.5%, the $HI_C$ value of the surfactant system would be 8.

Appellants have argued that their combination of polymer and surfactant system with a specific $HI_C$ value provides improved cleaning. However, the examiner wishes to point out that there are potentially an infinite number of combinations of surfactants and proportions that will yield an $HI_C$ value within appellants' range. Alkyl benzene sulfonate is perhaps the most common surfactant in existence, present in literally thousands of detergent compositions. Accordingly, the examiner estimates there are at least hundreds of detergent compositions having surfactant systems with an $HI_C$ value within the presently claimed range. For example, a surfactant composition containing 50% alkyl benzene sulfonate and 50% ethoxylated alcohol, both of which surfactants are ubiquitous in the art, would have an $HI_C$ value of approximately 8.5. Appellants have provided a comparison of two compositions with $HI_C$ values within their range and five compositions with $HI_C$ values outside their range to demonstrate improved cleaning. As there is potentially an infinite number of compositions with $HI_C$ values in their range and outside their range, these examples are not commensurate in scope with the invention as claimed.

Appellants have traversed the rejection of Swift et al, US 5,883,065, on the grounds that Swift et al do not teach a surfactant system having an $HI_C$ of from about 8 to about 9.2.

With respect to the $HI_C$ value, though the examiner acknowledges that Swift et al do not describe their surfactant system using the same parameters contrived by appellants, the surfactant system nevertheless, has an $HI_C$ value which meets that of the present claims. The examiner has calculated the $HI_C$ value of the example cited above as 10.7, conceivably within the range of "about 9.2" as presently claimed. Furthermore, if the proportion of nonionic surfactant set forth in claim 1 of Swift et al is used, that is, 70% of the surfactant system is nonionic surfactant, this adjustment would result in an $HI_C$ value of 8.9.

Appellants have argued that their combination of polymer and surfactant system with a specific $HI_C$ value provides improved cleaning. However, the examiner wishes to point out that there are potentially an infinite number of combinations of surfactants and proportions that will yield an $HI_C$ value within appellants' range. Alkyl benzene sulfonate is perhaps the most common surfactant in existence, present in literally thousands of detergent compositions. Accordingly, the examiner estimates there are at least hundreds of detergent compositions having surfactant systems with an $HI_C$ value within the presently claimed range. For example, a surfactant composition containing 50% alkyl benzene sulfonate and 50% ethoxylated alcohol, both of which surfactants are ubiquitous in the art, would have an $HI_C$ value of approximately 8.5. Appellants have

provided a comparison of two compositions with $HI_C$ values within their range and five compositions with $HI_C$ values outside their range to demonstrate improved cleaning. As there is potentially an infinite number of compositions with $HI_C$ values in their range and outside their range, these examples are not commensurate in scope with the invention as claimed.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Charles T Boyer
Primary Examiner
Art Unit 1751

June 11, 2004

Conferees
Yogendra Gupta
Patrick Ryan

YOGENDRA N. GUPTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224